RED GUM

AMERICA'S FINEST CABINET WOOD

RED GUM FACTS

GUM LUMBER MANUFACTURERS' ASSOCIATION

1339-44 BANK OF COMMERCE & TRUST BLDG., MEMPHIS, TENN.

¶ The members of the Gum Lumber Manufacturers' Association have made a careful study of the best methods of manufacturing and caring for Gum lumber and, therefore, afford the most reliable source of supply.

WRITE US FOR SAMPLES AND ANY FURTHER INFORMATION DESIRED

Red Gum Lumber

WHY RED GUM EXCELS:

COLOR
Soft, warm, reddish brown.

TONE
Rich, yet delicate. Pleasing—satisfying.

CHARACTER
Attractive—Artistic.

TEXTURE
Easily worked.
Close, interlocked grain.
An absolutely smooth surface for the finisher.
Best for wood carving.

SUPPLY
Abundant—Plentiful.
Will last for years to come.

ADAPTABILITY
Takes well any finish.
Takes any stain successfully.
Free from odor or taste.
Best cabinet wood available.

COST
Less than any reliable competitor.
Best results at lowest cost.

FINISH
Like the sheen of fine satin.
Especially adapted for dull finishes.
Does not show finger marks and is easily kept.
For white enamel finish there is no resinous matter to come through and spoil.

RELIABILITY
All ancient objections overcome by careful methods and scientific treatment.

WHY YOU NEED SAP GUM:

TEXTURE
Resists abrasion.
Does not sliver.
Free from acids and other ingredients injurious to nails.
Free from resinous matter.
Free from odor or taste.

ADAPTABILITY
Has more uses than any other wood.
Gives excellent satisfaction everywhere.
Fine for veneer cores.
Glues solidly and *stays glued.*

FINISH
Takes paint well and holds it, too.
Absolutely smooth finish.
Best for enamel finishes.

SUPPLY
Abundant—Plentiful.
Quick and easy to get.

COST
Most economical of reliable woods.
Most remarkable values in hardwood field.

AMERICA'S FINEST CABINET WOOD

RED GUM

RED GUM (*Liquidambar Stryraciflua*) is distributed from Fairfield County, Conn., to Southeastern Missouri, through Arkansas and Oklahoma to the valley of the Trinity River in Texas, and eastward to the Atlantic Coast. Its commercial range is restricted, however, to the moist lands of the lower Ohio and Mississippi basins and of the Southeastern Coast. It is one of the commonest trees throughout the hardwood bottom type of forest, and reaches a large size. These forests will furnish a supply of this wood for its many uses for years to come. The hardwood bottoms are for the greater part overflow land. The soil is alluvial and generally of a great fertility, and tree growth is for the most part extremely rapid. (United States Forest Service Bulletin No. 58.)

CHARACTERISTICS OF THE RED GUM TREE

In the best situations Red Gum reaches a height of 150 feet and a diameter of 5 feet. The stem is straight and cylindrical, with dark, deeply furrowed bark, and branches often winged with corky ridges. In youth, while growing vigorously under normal conditions, it assumes a long, regular, conical crown, much resembling the form of a conifer. After the tree has attained its height growth, however, the crown becomes rounded, spreading, and rather ovate in shape. When growing in the forest the tree prunes itself readily at an early period, and forms a good length of clear stem, but it branches strongly after making most of its height growth. (United States Forest Service Bulletin No. 58.)

COMMERCIAL TERMS

Commercially, the term "Red Gum" applies to the heart wood of the Red Gum tree. In Europe this wood is known as Red Gum, Satin Walnut and Hazlewood. Unselected Gum, or Sap Gum, may be partially heart wood and partially sap wood, or all sap wood. Unselected Gum, or Sap Gum, is often specified as Hazle Pine. Red Gum is furnished in either plain or quarter-sawed lumber and veneer, as is the Unselected, or Sap Gum. Red Gum selected for figure, also can be supplied in both lumber and veneer, and is now popularly known as "America's Finest Cabinet Wood." (For rules

for grading Gum lumber, see booklets issued by the Hardwood Manufacturers' Association of the United States, First National Bank Building, Cincinnati, O., and the National Hardwood Lumber Association, 1864 McCormick Building, Chicago, Ill.)

MARKET AND USES.

Sap Gum and Red Gum lumber has a wider market and is adaptable to a greater variety of uses than any other hardwood. Clear wood can be obtained in wide boards, an advantage which, with freedom from odor and taste, together with the many other good qualities mentioned in the following paragraphs, has resulted in the rapid increase in its use. Difficulties in the seasoning formerly stood in the way of the wide utilization of Gumwood, but these have now been overcome. Gumwood should be thoroughly kiln dried before using, and if properly kiln dried and seasoned, it will not warp, split or twist. When the same care and attention are given to the process of kiln drying Gum as are given to other fine cabinet woods, satisfactory results are always obtained. (See paragraph, "Kiln Drying," page 13.)

Europe has for years recognized the splendid workable qualities and artistic beauty of Red Gum as a cabinet wood, and during the year 1912 used 66,799,000 feet.

The following statistics were taken from the United States Forest Service Reports for the year 1912, and show the consumption of Red Gum by woodworking industries for twenty-two States. These statistics do not include the material used in cross-ties, cooperage stock, boxes and crates:

QUANTITY USED.

	Ft. (Board Measure)
Agricultural machinery and implements	11,874,000
Automobiles	615,000
Baskets, fruit and vegetable packages	32,305,000
Bungs and faucets	175,000
Bath room equipment	50,000
Brushes and brooms	67,000
Caskets and coffins	2,631,800
Cigar boxes	5,303,770
Churns and butter tubs	2,000,000
Car construction	1,013,140
Clocks	37,000
Doors, interior finish and general millwork	37,618,702
Electrical apparatus	202,500
Furniture	65,913,565
Firearms	210,000
Grain elevators and dumps	60,000

Handles	5,439,700
Incubators and poultry accessories	80,000
Laundry appliances	2,915,000
Mine equipment	150,000
Miscellaneous	43,843,048
Machine parts	66,000
Musical instruments	5,498,200
Professional and scientific instruments	75,000
Planing mill products	47,188,600
Pulleys and conveyors	16,582,500
Patterns and flasks	1,000
Pipes, tobacco	12,000
Plumbers' woodwork	266,000
Pianos and organs	2,585,000
Picture mouldings	5,363,750
Refrigerators and kitchen cabinets	5,865,500
Screens	1,560,000
Store and office fixtures	5,868,400
Shuttles, spools and bobbins	270,000
Sign and bill posting boards	200,000
Sewing machine parts	10,700,000
Ship and boat building	157,000
Shade and map rollers	500,000
Sporting goods	150,000
Trucks, wagons, light vehicles and parts	13,189,814
Toys, woodenware and novelties	1,792,836
Trunks and valises	1,229,590
Tanks, vats and windmills	985,000
Whips, canes and umbrella sticks	20,000
Total	332,630,415

VENEERS.

Thirty-three and one-third per cent. of the veneers manufactured from domestic woods are made of Red Gum. The use of Gum has been the prime factor in bringing the veneer industry to the degree of prominence it has attained. It is better adapted than most other woods for cutting into thin sheets; it takes glue better than any other wood; therefore, it has the distinction of being the ideal veneer wood. It is manufactured into rotary-cut, sliced and sawed veneer, and is used for a wide variety of purposes—from light weight fruit packages to the best grades of the richest-colored and highly-figured panels used in furniture, pianos and the most expensive and artistic architectural woodwork of all kinds.

FURNITURE.

Red Gum is now recognized as a leading cabinet wood in all parts of the world. It is extensively used in the manufacture of high grade furniture, built-in furniture, stairwork, car construction, etc., both in this country and foreign countries. It is often finished

RED GUM LUMBER

A DOOR PROPERLY REGARDED IS FURNITURE AND HAS A HIGHER PURPOSE THAN TO FILL A WALL OPENING. THE DIGNITY AND BEAUTY OF YOUR DOORS ARE INSURED IF YOU INSIST THAT THEY BE OF RED GUM.

to imitate more costly woods, such as Black Walnut, Cherry, Mahogany and especially Circassian Walnut, since lumber may be selected which has a natural figure closely resembling that of Circassian Walnut. Red Gum furniture finished "natural" does not show finger marks and is easily cared for.

DOORS AND INTERIOR TRIM.

Two of the most important uses of Red Gum are for doors and interior finish. Finished in its natural color, or stained, it may be made very attractive, and when properly seasoned, it fulfills every requirement for these purposes. Red Gum veneer-built doors are rigid and free from warp, and rank with the very best, both in appearance and stability. The effects that can be obtained by staining are varied and unusually attractive, and the doors have proven perfectly satisfactory from every point of view. Another point worth considering is the fact that Red Gum has a close, interlocked grain, and is free from resinous matter—which makes it very difficult to ignite. Many of the finest hotels, banks, clubs, office buildings, apartments, dwellings, etc., are finished with Red Gum doors and trim, and there is a greatly increased use of Red Gum for these purposes, for which it is an ideal wood in every respect.

CHURCH FINISH AND FURNITURE.

The natural color of Red Gum is a soft, rich, reddish brown, and it is a wood of rare dignity and charm. There is no wood in the world easier worked or better adapted to any required finish. These qualities make it especially appropriate for the interior finish and furniture of churches, for which it is now being extensively used.

HOSPITALS.

Red Gum is peculiarly desirable for use in the interior of hospital buildings, for the reason that it is odorless, and has a closely interlocked grain, which makes it practically impossible to force any substance into the wood itself, and thus is easy to keep aseptic. Red Gum and Sap Gum have a lack of resinous matter, which makes them especially desirable for white enamel, as there is nothing to come through and spoil the finish. They take paint with avidity, which sets to a hard and brilliant face that never cracks or blisters. There is no wood superior to Gum for this purpose.

WAGON BOX BOARDS.

A large amount of Gumwood is put into wagon box boards, which have a separate grade under the rules for grading hardwood lumber.

Red Gum Lumber

Much of the sap wood which will make the grade of wagon box boards is manufactured for this purpose because, when thoroughly dried and painted, sap wood is as good as heart. Owing to the size of the Red Gum tree and the small number of its knots, a larger percentage of such boards can be cut than from any competing species. It costs less to paint, is durable, and is by far the most economical wood which can be used for wagon boxes.

AUTOMOBILE AND BUGGY BODIES.

The Red Gum tree produces a good percentage of boards of panel specifications, and Gum panels are extensively used in the manufacture of automobile and buggy bodies, both in this country and in Europe. Gum is especially adapted for this purpose, since there is no wood which takes and holds paint to better advantage. It finishes perfectly smooth; the percentage of breakage in bending is less than that of any other wood, and Gumwood panels rank with the very best vehicle woods known.

WOOD PULLEYS.

Sap Gum is extensively used in the manufacture of wood pulleys, because Sap Gum is stronger for its weight than any other wood; Sap Gum takes glue better than any other wood; it will not sliver or check, nor will it develop shake or splinter; it finishes absolutely smooth and makes a perfect running surface for belts.

CORE STOCK.

Due to its qualities for taking and holding glue, Sap Gum, when properly seasoned, fills every requirement for core stock, and it is rapidly taking the place of other woods for this use.

FLOORING.

Red Gum and Unselected Gum are considered excellent flooring materials. Properly seasoned, they will not shrink. Gum flooring wears evenly and smoothly and will not sliver. It is easily kept and is durable.

CEILING AND SIDING.

Unselected Gum siding and ceiling contain no acid or other ingredients injurious to nails. It is close-grained, presenting a smooth surface for paint. It should be primed, however, as a precautionary measure as soon as it is in place.

PAVING BLOCKS.

For paving blocks the essentials are durability, close grain and the power of resisting abrasion. These are found in Red Gum. For treated blocks, Unselected Gum is used.

AN ALL WOOD INTERIOR, SHOWING THE PECULIARLY PLEASING AND ATTRACTIVE EFFECTS TO BE HAD WITH RED GUM PANELING AND INTERIOR CABINET WORK—THE BEST OF THE BROWN WOODS.

PORCH COLUMNS.

Unselected Gum is now generally used in the manufacture of porch columns, possessing, as it does, every element of stability and strength.

CURTAIN POLES.

Large quantities of Gumwood are used in the manufacture of curtain poles, for which it meets every demand satisfactorily.

TURNING SQUARES.

A large amount of Gum is now being cut into 2x2 and other square stock of various sizes for turning blocks, and has received special attention for this purpose in England and Germany, and many mills are now cutting dimension stock for export. The rapid rise of Red Gum for use in turning squares is due to the fact that there is no wood more easily worked. This same quality makes Red Gum an ideal material for woodcarving.

OTHER USES.

Red Gum and Sap Gum are also being used for many purposes which have not as yet been mentioned in detail. The common grades are widely used in the manufacture of medium-grade furniture of all kinds, the better grade of boxes, and a number of novelties. Unselected Gum is extensively used for interior work in the manufacture of case goods. Various other articles are made of Gumwood, such as coffin boards, barrels, packing boxes, screen doors, mouldings, saw handles, gun stocks, broom handles, mop handles, wheelbarrows, brush backs, mouse traps, all kinds of animal traps, etc., its excellent character, low cost and abundant supply being such as to make it peculiarly desirable for these uses.

FINISHING.

For furniture, interior trim and fine cabinet work, the use of Red Gum gives to architects and designers a wide latitude for taste and individuality in color schemes. Red Gum is especially adaptable to a dull, wax or oil finish, and a beautiful effect is brought out in the natural finish, as all Red Gum, whether plain or figured, is peculiarly pleasing and attractive. Figured Red Gum especially, with its ornate richness of stripes and variable color tones, yet with a character as soft and delicate as the sheen of fine satin, shows with unusual effectiveness that subtle, artistic quality which attracts but never tires the eye, and lends quality, dignity and grace to its environment. Red Gum "finished natural" is rapidly growing in

favor among people of taste and refinement, who prefer to exercise their own individuality and judgment, rather than follow the dictates of historic bias; however, any of the following stains, as well as many others, when properly done, may be employed with entire success and with very handsome results:

Mahogany (light or dark).
Black Walnut (American).
French and Italian Walnut.
Circassian Walnut.
Flemish Brown.
Mission and Dutch Brown.
Forest Green.
Silver Gray.

Quartered Red Gum, on account of its peculiar grain, is most adaptable for use with mahogany stain, which brings out the changeable color tones, closely resembling mahogany. When either walnut or mahogany stains are used, the most pleasing colors are produced. The stain is not applied sufficiently heavy to obliterate, but just enough to leave plainly visible the beautiful grain of the wood.

A FEW FORMULAS.

No. 1. Furniture Finish.

First, sandpaper the wood perfectly smooth (this is very essential in any wood in order to obtain a good finish). Then apply one or two coats of shellac, sandpapering each coat when dry; then two or three coats of high grade varnish, rubbed down with steel wool between each coat. The final coat should stand for at least eight days, after which it should be rubbed with water and pumice stone first, and the next day with rubbing oil and pumice. If a stain is desired, the same process should be followed, excepting that first the finisher should stain the wood to the desired color.

No. 2. Wax Finish, Natural.

First, one coat of white shellac; sandpaper when thoroughly dry, then finish with prepared wax.

No. 3. Walnut Finish.

To put a walnut finish on Gum, the following formula will give perfect satisfaction:

1¼ oz. walnut crystals.
¼ oz. blue-black nigrosene.
Mix with two gallons of water.

If a lighter color is desired, reduce the stain half with water. On top of this, after dry, it should receive two coats of white shellac, this to be sanded down and waxed.

No. 4. Eggshell Gloss for Interior Finish.

Two coats of pure white shellac, two coats of clear rubbing and polishing varnish. Allow each coat to dry thoroughly and rub down with steel wool between each coat, the final coat to be rubbed down with pumice stone and oil.

No. 5. White Enamel Finish.

Unselected Gum and Red Gum have superior qualities for taking and retaining white enamel finish. First apply three coats of flat white or any

standard enamel undercoater, then apply two or more coats of any good enamel. Time should be allowed between each coat for the paint to become thoroughly dry. Each coat should be smoothed with fine sandpaper, excepting the last coat, which may be rubbed with pumice stone and water to produce a dull finish. Special formulas are used for enamel finish on furniture and pianos, and this finish on Gum is equal to polished ivory.

CARE OF HARDWOOD DOORS AND TRIM.

All woods are porous, and the drier and more thoroughly seasoned they are, the more readily they absorb moisture and are affected by atmospheric conditions. When unfinished hardwood doors and trim are placed in a damp room they quickly absorb the moisture in the air, which causes expansion or swelling, and when they return to normal (that is, when the moisture is again dried out) they are liable to warp and open at the joints, and it takes much time and labor to repair the damage. This can easily be avoided if only a little care is exercised.

In the first place, as soon as hardwood doors and trim are received, have a finisher give them one coat of filler, shellac or stain, as the case may require. The reason for this is that nearly all doors and trim are shipped "in the white," and all of the pores of the wood are open and ready to absorb moisture unless protected.

Do do not hang doors or put on trim in a damp, freshly-plastered building. All hardwood finish should be back-painted with one heavy coat of asphaltum stain or lead and oil. This is to prevent absorption of moisture from the plaster. Mortar contains large quantities of water, and until the moisture is dried out of the walls the house is not in the right condition to receive hardwood doors, or any other fine woodwork which is quickly affected by such condition. Wood that is not back-painted is simply protected on one side and allows the moisture to come in on the other.

The manufacturer should not be censured nor the wood condemned if the product, upon which every care is exercised in the making, is not handled properly upon arrival at destination. Leading architects are specifying and insisting that heat first be turned on, so as to dry out the building thoroughly before hanging hardwood doors or putting on trim. If these hints and suggestions are carried out no trouble will be experienced.

KILN DRYING.

The length of time required to kiln dry lumber of any kind thoroughly, depends somewhat upon the condition of the lumber when placed in the kiln.

It is a difficult matter to lay down an exact formula for kiln drying Gum lumber, or, for that matter, lumber of any kind, for the reason that the application of the requisite heat and circulation must be properly regulated throughout the entire process, or trouble is almost certain to result.

Moreover, woods of different shapes and thicknesses are very differently affected by the same treatment. The tissue composing the wood, which may vary in form and physical properties, exerts its own peculiar influence upon the behavior of the wood while drying, therefore to kiln dry lumber of any kind properly the operation requires an experienced kiln man, who knows how to handle these different questions as they arise. We have interviewed any number of people on the question of kiln drying Gum lumber, and as a result have compiled the following simple rules, which will aid in keeping the lumber in proper condition:

The lengths should be kept separate, that is, 12-foot lumber should be piled on one truck, 14-foot on another, etc. Stickers should be placed directly over each other. There should be at least seven stickers to a 12-foot length. An air space of about two inches should be left between each board. From this point on through the kiln it is difficult, as already stated, to lay down an exact formula, but an experienced kiln man can successfully handle it from this point on, and it is safe to say that about the same methods should be employed as when drying Birch lumber, care always being taken not to dry the lumber too fast. Many experienced men have told us that the maintenance of a high humidity in drying Gum lumber is necessary for keeping the lumber straight, and drying the boards in the center as well as on the surface. The humidity should start at about 90 per cent. and a temperature of 125 degrees F., and the condition when drying is completed should be a humidity of from 40 per cent. to 50 per cent. and a temperature of 175 degrees F.

After the lumber is thoroughly dry it is a good idea to take it from the trucks while it is hot and pile it in a solid pile on a firm foundation in a dry shed, and leave it for about ten days before using. Air dried Sap Gum, 1-inch thick, should remain on sticks about six months before going into kiln. Air dried Red Gum should remain on sticks about eight months before going into kiln.

Paterno Bros.
BUILDERS
AND
GENERAL CONTRACTORS
New York

Sept. 25th, 1914.

Gum Lumber Manufacturers Association,
Memphis, Tenn.

Gentlemen:-

Replying to your letter of the 17th inst., would say, that we have used considerable Red Gumwood doors and trim in a number of the large apartment buildings which we erected in this City during the past six or seven years.

The results of same have been very satisfactory, both as to durability and finish.

Very truly yours,
PATERNO BROS.
PER Benj. Paterno

Hotel La Salle

Chicago, September 21, 1914.

Mr. J.T. Kendall,
c/o Gum Lumber Manfgs. Assn.,
Memphis, Tennessee.

Dear Sir:

The Gumwood doors and trim in use on the bed room floors, HOTEL LA SALLE, have given unusually satisfactory service, and we can truthfully say that we are well pleased with the manner they have withstood the very hard usage.

Yours very truly,
HOTEL LA SALLE,
Edward J. Stevens
Vice President & Manager.

EJS-FM

JOHN H. ATWERTHE, PRESIDENT
BERNARD BERNHEIM, VICE PRESIDENT
FRANK NILLEN, VICE PRESIDENT
BRENT ALTSHELER, CASHIER
PHIL. JUDGE BOHNÉ, ASST. TREASURER

LINCOLN SAVINGS BANK

CAPITAL $300,000.00

LOUISVILLE, KY., April 20/1914

Gum Lumber Manufacturers Assn.
Bank of Commerce & Trust Co. Bldg.
Memphis, Tenn.

Dear Sirs:-

In reply to your letter of the 17th inst beg to state that the Gumwood doors and trim in our building have made an ideal finish in every respect, and we can recommend it as equal or superior to any other hardwood

Very truly yours,
LINCOLN SAVINGS BANK BLDG.
Wm. [illegible]
Superintendent

2146

The Union National Bank
Capital $200,000 Surplus $75,000
Streator, Illinois

Streator, Ill., Sept. 19, 1914.

The Gum Lumber Manufacturers Association,
Memphis, Tennessee.

Gentlemen:

In answer to your inquiry we wish to say that the Banking Department of our bank building is finished entirely in Gum Wood. We have occupied the building a little over two years now and this finish has not only been entirely satisfactory in every way, but we consider it the very best wood to use in work of this kind.

If we were doing the work over again we would certainly specify Gum Wood for interior finish.

Yours truly,

S. W. Plumb

SWP:E. Vice. President.

Great Southern Fire Ins. Realty Co.
N. E. Cor. Fifth and Walnut
Louisville, Ky.
J. Bornstein, President

JACOB BORNSTEIN

GENERAL

Contractor and Builder

ALSO DEALER IN

REAL ESTATE

HOME PHONE 4021

MAIN OFFICE
601-02 GREAT SOUTHERN BLDG.

RESIDENCE
1132 S. FOURTH ST.

J. BORNSTEIN

LOUISVILLE, Ky. September 18 1914

Gum Lumber Manufactures Association,
Memphis, Tenn. U.S.A.

Gentlemen:

Your letter of the 17th at hand, you desire to know the wear and tear of the doors and trimmings of gum wood used in my building.

I can tell you I have been in the contracting business for nearly forty (40) years and I never did find another wood work the wear any better than the gum that is in my building which of course this was selected goods.

You will enclose find a picture of the building and you may place it in your booklet if you wish.

Yours very truly,

Great Southern Fire Insurance Realty Co.

Jacob Bornstein
President.

Sovereign Camp Woodmen of the World

OMAHA NEB

Office of
JNO. N. CRAWFORD
Superintendent
WOODMEN OF THE WORLD BLDG
FARNAM DOUGLAS 1111

Building Committee
W. A. FRASER, Omaha, Neb.
JNO. T. YATES, Omaha, Neb.
ED. D. CAMPBELL, Port Huron, Mich.
DR. S. BRADSHAW, Little Rock, Ark.
W. H. WELLS, Woodmen Bldg.

Mr. J.M. Pritchard, Secretary,
Gum Lumber Manufacturers' Ass'n.,
Bank of Commerce & Trust Bldg.,
Memphis, Tenn.

Dear Sir:-

Replying to your inquiry of the 17th relative to our experience with the Gumwood finish in this building, beg to reply that after twenty months operation we are unable to find one single objection to the material which you represent and it has some advantages over other finish, which are very prominent among them being that while the material has a very high polish it does not show finger marks to any great extent and is therefore, easily cared for. Contrary to expectations we find that every joint is exactly as tight as when first installed and in perfect alignment.

We would estimate that we have saved fully five per cent in the cost of cleaning our woodwork alone, for the reason stated above. We have no Gumwood doors, they being Circassian Walnut and these two woods match perfectly in finish and seem to harmonize in the color schemes of the various tenants, who move in with numberless kinds of office furniture such as mahogany, light and dark Oak, etc. Upon the whole we are glad to recommend the Gumwood as being very satisfactory.

Yours very truly,

WOODMEN OF THE WORLD BLDG.

Jno N Crawford
Superintendent.

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